

Ordinance for the Master's Programme

1. Degrees Offered

The Masters degrees to be offered under this Ordinance are as follows:

1.1 Master of Science in

Advanced Engineering Management	abbreviated as	M.Sc. Engg. (AEM)
Chemical Engineering	abbreviated as	M.Sc. Engg. (Chem)
Civil Engineering (Environmental)	abbreviated as	M.Sc. Engg. (Civil & Environmental)
Civil Engineering (Geotechnical)	abbreviated as	M.Sc. Engg. (Civil & Geotechnical)
Civil Engineering (Structural)	abbreviated as	M.Sc. Engg. (Civil & Structural)
Civil Engineering (Transportation)	abbreviated as	M.Sc. Engg. (Civil & Transportation)
Computer Science and Engineering	abbreviated as	M.Sc. Engg. (CSE)
Electrical & Electronic Engineering	abbreviated as	M.Sc. Engg. (EEE)
Environmental Engineering	abbreviated as	M.Sc. Engg. (Environmental)
Industrial & Production Engineering	abbreviated as	M.Sc. Engg. (IP)
Information and Communication Technology	abbreviated as	M.Sc. Engg. (ICT)
Materials & Metallurgical Engineering	abbreviated as	M.Sc. Engg. (MM)
Mechanical Engineering	abbreviated as	M.Sc. Engg. (Mech)
Mineral Resources Engineering	abbreviated as	M.Sc. Engg. (Mineral Resources)
Naval Architecture and Marine Engineering	abbreviated as	M.Sc. Engg. (NAM)
Petroleum Engineering	abbreviated as	M.Sc. Engg. (Petroleum)
Water Resources Engineering	abbreviated as	M.Sc. Engg. (WR)

1.2 Master of Engineering in

Advanced Engineering Management	abbreviated as	M. Engg. (AEM)
Chemical Engineering	abbreviated as	M. Engg. (Chem)
Civil Engineering (Environmental)	abbreviated as	M. Engg. (Civil & Environmental)
Civil Engineering (Geotechnical)	abbreviated as	M. Engg. (Civil & Geotechnical)
Civil Engineering (Structural)	abbreviated as	M. Engg. (Civil & Structural)
Civil Engineering (Transportation)	abbreviated as	M. Engg. (Civil & Transportation)
Computer Science and Engineering	abbreviated as	M. Engg. (CSE)
Electrical & Electronic Engineering	abbreviated as	M. Engg. (EEE)
Environmental Engineering	abbreviated as	M. Engg. (Environmental)
Industrial & Production Engineering	abbreviated as	M. Engg. (IP)
Information and Communication Technology	abbreviated as	M. Engg. (ICT)
Materials & Metallurgical Engineering	abbreviated as	M. Engg. (MM)
Mechanical Engineering	abbreviated as	M. Engg. (Mech)
Mineral Resources Engineering	abbreviated as	M. Engg. (Mineral Resources)
Naval Architecture and Marine Engineering	abbreviated as	M. Engg. (NAM)
Petroleum Engineering	abbreviated as	M. Engg. (Petroleum)
Water Resources Engineering	abbreviated as	M. Engg. (WR)

1.3

Master of Architecture	abbreviated as	M. Arch
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1.4

Master of Urban & Regional Planning by Course and thesis	abbreviated as	MURP
Master of Urban & Regional Planning by Courses and project	abbreviated as	MURP

1.5

Master of Science in Water Resources Development	abbreviated as	M.Sc. (WRD)
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1.6 Any other Masters Degree approved by the Academic Council may also be offered under this ordinance.

2. Admission Requirements

2.1 For admission to the courses leading to a Master's degree (M.Sc. Engg. / M. Engg. / M. Arch. / MURP / M. Sc.) an applicant

(a) must have a minimum GPA of 3.50 out of 5.00 or a first division or equivalent in any one of S. C and H. S. C or in equivalent examinations and must not have a GPA less than 2.00 out of 5.00 or a third division or equivalent in any of the aforementioned examinations.

(b) must have at least 50% marks or a minimum GPA of 2.50 out of 4.0 or its equivalent in B. Sc. Engg. / M. A or M. Sc. or MSS / B. Arch. / BURP in the relevant branch.

(c) Specific requirements for different departments and institutes are spelt out in the following sections.

2.2 For admission to the courses leading to the degree of M.Sc. Engg. /M. Engg. in any branch, an applicant must have obtained a B.Sc. Engg. Degree in the relevant branch or an equivalent degree from any recognized institution. An applicant with a B. Sc. Engg. Degree in other branches of engineering may also be eligible for admission to the courses leading to the degree of M.Sc. Engg. (Environmental) / M. Engg. (Environmental), M.Sc. Engg. (AEM)/M. Engg. (AEM) and M. Sc. Engg. (MM) / M. Engg. (MM). In such cases, the selected candidate may be required to undertake non-credit prerequisite courses at the undergraduate and / or postgraduate level as may be determined by the BPGS of Civil Engineering Department, Industrial and Production Engineering Department and Materials and Metallurgical Engineering Department respectively.

2.3 For admission to the courses leading to the degree of M. Arch. an applicant must have obtained a B. Arch degree or its equivalent degree from any recognized institution.

2.4 For admission to the courses leading to the degree of MURP an applicant must have either a Bachelor's degree in Urban & Regional Planning / Architecture / Engineering / Agricultural Economics or a four-year degree in Mathematics / Statistics / Physics / Public Administration /

Sociology / Social Work / Geography / Economics or its equivalent from any recognized institution.

or

2.5 For admission to the courses leading to the degree of M.Sc. Engg. (ICT) / M. Engg. (ICT) an applicant must have either

a Bachelor's degree in Computer Science and Engineering or Electrical and Electronic Engineering or Computer Engineering or Computer Science or Information Technology having a minimum GPA of 2.5 out of 4.0 or its equivalent from any recognized university,

or

a PG. Dip. (ICT) / PG. Dip. (IT) having a minimum GPA of 2.65 out of 4.0 or its equivalent from any recognized university plus B. Sc. Engineering degree or Master's degree / four year Bachelor's degree in Physics or Mathematics.

2.5.1 A student on recommendation of the relevant RAC and as approved by the CASR may be transferred to the Masters Programme and may be allowed to transfer a maximum of 12 credits of courses provided,

(a) he/she has completed the academic requirement for the PG. Diploma (ICT) from this university, but results not published.

(b) the courses are common to both P. G. Diploma and Master's Program and

(c) he/she has earned a minimum GPA of 3.00 out of 4.0 in individual courses. If he/she fails to qualify for the Masters Degree, he/she may be awarded the P. G. Diploma.

2.6 For admission to the courses leading to the degree of M.Sc. (WRD) an applicant must have either a Bachelor's degree in Civil Engineering / Water Resources Engineering / Agricultural Engineering / Environmental Science or its equivalent having a minimum GPA of 2.5 out of 4.0 or PG. Dip. (WRD) having a minimum GPA of 2.65 out of 4.0 or its equivalent from any recognized institution.

3. Admission and Registration Procedures

3.1 Applications for admission to the above courses shall be invited through regular means of advertisement and shall be received by the Registrar.

3.2 Before being finally selected for admission a candidate may be required to appear at an oral and / or written test by a Selection Committee as constituted by the BPGS / RAC. He/She will be required to take pre-requisite courses as may be prescribed by the Selection Committee. Every

selected candidate, unless he/she has already been registered, shall get himself/herself registered with the University.

3.3 After admission each student shall be assigned, by the relevant BPGS/RAC, an Adviser from among the teachers of the Department / Institute not below the rank of an Assistant Professor. In advance of each enrolment and course registration for any semester, the Adviser or Supervisor (as appointed by Art. 8.1 & 9.1 of this ordinance) shall check and approve his/her student's schedule for subjects, pre-requisites as recommended by the Selection Committee and the total hours. The student is expected to consult his/her Adviser/Supervisor on all academic matters but, it is the responsibility of the individual student to see that his/her schedule conforms to the academic regulations.

3.4 Every registered student shall get himself/herself enrolled on payment of prescribed fees and other dues as per the University rules before the commencement of each semester. In an academic year there will be normally two semesters. All course registration must be completed within two weeks from the start of a semester.

3.5 On the recommendation of the appropriate BPGS / RAC and CASR the rules for admission into the University for post graduate studies shall be framed from time to time by the Academic Council. CASR on its own may, if it deems fit, recommend such rules for admission for approval of the Academic Council.

3.6 No late registration will be allowed after two weeks of designated dates of registration. Late registration after this date may only be accepted for thesis/project if the student submits a written appeal to the Registrar through the concerned Head and can document extenuating circumstances such as medical problems (physically incapacitated and not able to be presented) from the Chief Medical Officer (CMO) of the University or some other academic commitments which precluded registration prior to the last date of registration.

Student will be charged a late registration fee of Tk.1000.00 (One thousand) only. This extra fee will not be waived whatever be the reason for late registration.

3.7 If a student is unable to complete the final examination of a semester due to serious illness or serious accident or official commitment he/she may apply to the Registrar in a prescribed form through Head/Director of the degree awarding Department Institute for total withdrawal from the semester within a week after the end of the semester final examination.

The application must be supported by a medical certificate from the CMO, BUET or relevant Official documents. The Academic Council will take the final decision about such application on the recommendation of the relevant BPGS/RAC.

4. Academic Requirements and Regulations

4.1 The minimum duration of the M.Sc. Engg./ M. Engg./ M. Arch. and M.Sc. program shall be three semesters.

The minimum duration of MURP shall be three semesters but four semesters for MURP students not having BURP or equivalent degree.

A candidate for the Master's degree must complete all the requirements for the degree within five academic years (Session) from the date of the first admission in the respective programme.

4.2 Academic progress shall be measured in terms of credit hours earned by a student. One credit hour subject shall normally require 14 hours of lecture for one semester; while one credit hour for thesis/project/ laboratory should normally require 42 hours of work for one semester. The number of credit hours for each subject shall be as specified in the syllabus of the respective department / institute.

4.3 The credit hour requirement for the Masters Program shall be as follows:

4.3.1 For the degree of M.Sc. Engg. a student must earn a minimum of 36 credit hours including a thesis for which 18 credit hours shall be assigned.

4.3.2 For the degree of M. Engg. a student must earn a minimum of 36 credit hours including a project for which 6 credit hours shall be assigned.

4.3.3 For the degree of M. Arch. a student must earn a minimum of 36 credit hours including a thesis for which 18 credit hours shall be assigned.

4.3.4 For the degree of MURP (by course and thesis) a student must earn a minimum of 36 credit hours (48 credit hours for students not having BURP or equivalent degree) including a thesis for which 18 credit hours shall be assigned.

For the degree of MURP (by course and project) a student must earn a minimum of 36 credit hours (48 credit hours for students not having BURP or equivalent degree) including a project for which 6 credit hours shall be assigned.

4.3.6 For the degree of M.Sc. (WRD) a student must earn a minimum of 36 credit hours including a thesis for which 18 credit hours shall be assigned.

4.4 There shall be two categories of students, namely, full-time students and part-time students.

4.4.1 A student may enroll as a part-time student.

Students, serving in different organizations, may also be admitted as part time students with the written consent of the employer. A part time student may be assigned a maximum of 9 credit hours of course including thesis/ project work in any semester.

4.4.2 Full time students must register for a minimum of 12 credit hours and a maximum of 15 credit hours per semester. A full time student shall not be allowed to be in the employment of any organization (even as a part time employee). However, they may be employed as teaching/research assistant at the University. If a full time student becomes an employee (full time or part time) of any other organization in the middle of a semester, he/she may, with the approval of the Head of the Department / Director of the Institute and his/her Employer, be allowed to continue as a full time student for that semester.

4.4.3 A student may be allowed to switch from part-time to full-time or vice versa on the recommendation of the respective BPGS/RAC before the commencement of a semester.

4.5 The courses of study in different departments / institutes shall be as recommended by the respective BPGS / RAC and the Faculty / CASR and approved by the Academic Council. The BPGS / RAC may review the curriculum from time to time and recommend any changes as may be considered necessary. The courses to be offered in any semester shall also be as determined by the relevant BPGS / RAC.

4.6 A student on the recommendation of the relevant BPGS / RAC and as approved by the CASR may be allowed to transfer a maximum of 9.0 credits of the courses completed by the student at a recognized institution provided that the courses were not taken earlier than five calendar years from the date of his/her first enrolment in the respective programme at BUET and that the student obtained a minimum GP of 3.0 out of 4.0 or its equivalent in such courses and that the courses are equivalent to the approved courses of BUET.

5. Grading system

5.1 Final grades for courses shall be recorded as follows:

Grade	Merit description	Grade points
A (Plus)	Excellent	4.0
A	Very good	3.5
B (Plus)	Good	3.0
B	Average	2.5
C	Pass	2.0
F	Failure	0.0
I	Incomplete	–
S	Satisfactory	–
U	Unsatisfactory	–
W	Withdrawn	–

5.2 Courses in which the student gets F grades shall not be counted towards credit hour requirements and for the calculation of Grade Point Average (GPA)

5.2.1 The C grades, up to a maximum of two courses, may be ignored for calculation of GPA at the written request of the student to the Head of the Department / Director of the Institute on the recommendation of the supervisor / Advisor, provided that the student has fulfilled the total course credit hour requirement in the remaining subjects with a minimum GPA of 2.75.

5.2.2 When a course is repeated for improvement, better grade shall be counted for calculation of GPA.

5.2.3 Performance in all the subjects including all the F grades shall be reflected in the transcript.

5.3 Grade I is given only when a student is unable to sit for the examination of a course at the end of the semester because of circumstances beyond his/her control. He/She must apply to the Head of the Department / Director of the Institute within one week after the examination to get an I grade in that course. It must be completed within the next two semesters, otherwise, the I becomes an F grade. He/She may, however, be allowed to register without further payment of tuition fees for that course.

5.4 Satisfactory or Unsatisfactory- used only as final grades for thesis/project and non-credit courses. Grade for thesis/ project "In Progress" shall be so recorded. If, however, thesis / project is discontinued an I grade shall be recorded.

5.5 Students may enroll for non-credit course(s) termed as audit course(s) on recommendation of his/her thesis / project Supervisor and Head of the Department / Director of the Institute.

5.6 A student shall withdraw officially from a course within two working weeks of the commencement of the semester or else his grade in that course shall be recorded as F unless he/she is eligible to get a grade of I. A student may be permitted to withdraw and change his/her course within the specified period with the approval of his/her Adviser, Head of the Department / Director of the Institute and the respective teacher(s) concerned. (In that case his / her grade in the courses registered shall be recorded as 'W' in his Academic Record but shall not be reflected in the transcript.)

5.7 Numerical markings may be made in answer scripts, tests etc., but all final gradings to be reported to the Controller of Examinations shall be in the letter grade system as detailed below:

90% and above	A (Plus)
80% to below 90%	A
70% to below 80%	B (Plus)
60% to below 70%	B
50% to below 60%	C
Below 50%	F

6. Conduct of Examination

6.1 In addition to tests, assignments and/ or examinations during the semester as may be given by the teacher(s) concerned, there shall be a written examination and / or other tests for each of the subjects offered in a semester at the end of that semester, the dates of which shall be announced by the Controller of Examinations, BUET as advised by Dean of the respective Faculty / The Director of the respective Institute at least two weeks before the commencement of the examination. The final grade in a subject shall be based on the performance in all tests, assignments and / or examinations.

6.2 The Controller of Examinations shall keep up to date record of all the grades obtained by a student in individual Academic Record Card. Grades shall be announced by the Controller of Examinations at the end of each semester. In addition, each student is entitled to one official transcript of the University record at the completion of his academic programme from the office of the Controller of Examinations on production of statement of clearance from all departments/ institutes/offices.

6.3 The BPGS / RAC of a department / institute shall recommend the names of the paper setters and examiners for the semester examinations at least two weeks before the date of commencement of the examination to the Vice-Chancellor for approval.

7. Qualifying Requirements

7.1 The qualifying requirement for graduation is that a student must earn a minimum grade point of 2.65 based on the weighted average in his course work.

7.1.1 Two courses may be repeated for improvement with the prior approval of the Head of the Department / Director of the Institute on the recommendation of the Supervisor / Advisor. Such approval shall be reported to the BPGS/RAC.

7.1.2 A student obtaining F grade in a course may be allowed to repeat the course with the prior approval of Head of the Department / Director of the Institute on the recommendation of the Supervisor / Advisor. Such approval shall be reported to the BPGS/RAC.

7.2 A student shall not be allowed to continue the programme if he/she obtains a total of three or more F grades in one or more than one subjects taken together, during the course of his / her studies.

7.3 If at the end of the second or any subsequent semester, the cumulative GPA falls below 2.5 he/she shall not be allowed to continue in the programme.

7.4 In addition to successful completion of course works every student shall submit a thesis on his research work or a report on his/her project work, fulfilling the requirements as detailed in the following sections.

8. Thesis

8.1 Research work for a thesis shall be carried out under the supervision of a full-time member of the staff belonging to the relevant department / institute. However, in special cases, a full-time member of the staff belonging to a department / institute/centre outside the student's relevant department/institute of the University may be appointed as Supervisor, if the research content of the thesis is within the field of specialization of the member of the staff. A Co-supervisor from within or outside the department / institute may be appointed, if necessary. The thesis proposal of a student shall be submitted for approval of the CASR on the recommendation of the relevant BPGS / RAC after completion of at least 12 credit hours of course work.

8.2 If any change is necessary in the approved thesis (title, content, cost, Supervisor, Co-supervisor etc.) it shall be submitted for approval of the CASR on recommendation of the relevant BPGS/ RAC

8.3 The research work must be carried out in this University or at a place(s) recommended by the BPGS. The work schedule and financial involvement should be mentioned in the research proposal for carrying out research work outside the university.

8.4 Every student shall submit to the Head of the Department / Director of the Institute, through his/her Supervisor, required number of type written copies of his/her thesis in the approved format (as given in Appendix I) on or before a date to be fixed by the Supervisor concerned in consultation with the Head of the Department / Director of the Institute.

8.5 The student shall certify (as given in Appendix-II) that the research work was done by him/her and that this work has not been submitted elsewhere for the award of any other diploma or degree.

8.6 The thesis should demonstrate an evidence of satisfactory knowledge in the field of research undertaken by the student.

8.7 Every student submitting a thesis in partial fulfillment of the requirements of a degree, shall be required to appear at an oral examination, on a date or dates fixed by the Supervisor concerned in consultation with the Head of the Department and must satisfy the examiners that he/she is capable of intelligently applying the results of this research to the solution of problems, of undertaking independent work, and also afford evidence of satisfactory knowledge related to the theory and technique used in his/her research work.

8.8 Thesis Examination Board

8.8.1 An Examination Board for every student for thesis and oral examination shall be approved by the CASR on recommendation of the thesis Supervisor in consultation with the Head of the Department. The Supervisor shall act as the Chairman and the Head of the Department will be

an ex-officio member of the Examination Board. The Board shall consist of at least four members including the Head of the Department and the Supervisor. The Examination Board shall be constituted as follows:

(i)	Supervisor	Chairman
(ii)	Co-supervisor (if any)	Member
(iii)	Head of the Department (Ex-officio)	Member
(iv)	One or two members from within the Department	Member
(v)	One external member from outside the student's Department	Member (External)

8.8.2 If any examiner is unable to accept the appointment or has to relinquish his appointment before the examination, the Vice- Chancellor shall appoint another examiner in his/her place, on suggestion from the Supervisor in consultation with the Head of the Department. This appointment will be reported to the CASR.

8.8.3 In case a student fails to satisfy the Examination Board in thesis and /or oral examination, the student shall be given one more chance to resubmit the thesis and/or appear in oral examination as recommended by the Board.

9. Project

9.1 Project work shall be carried out under the supervision of a full-time member of the staff belonging to the relevant Department / Institute. However, in special cases, a full-time member of the staff belonging to a Department / Institute / centre outside the student's relevant Department / Institute of the University may be appointed as Supervisor, if the research content of the project work is within the field of specialization of the member of the staff. The title of the project, cost and the Supervisor shall be recommended by the BPGS / RAC for approval of the Vice-Chancellor. This approval will be reported to the CASR.

9.2 If any change is necessary of the approved project (title, content, cost, Supervisor etc.) it shall be approved by the Vice-Chancellor on the recommendation of the relevant BPGS / RAC. This approval will be reported to the CASR.

9.3 The project work must be carried out in this University or at a place approved by the Vice-Chancellor on recommendation of the Supervisor in consultation with the Head of the Department / Director of the Institute. The work schedule and financial involvement should be mentioned in the project proposal for carrying out project work outside the university.

9.4 Every student shall submit to the Head of the Department / Director of the Institute, through his/her Supervisor, required number of type written copies of his/her project report in the

approved format (As given in Appendix- I) on or before a date to be fixed by the Supervisor concerned in consultation with the Head of the Department / Director of the Institute.

9.5 The student shall certify (as given in Appendix-11) that the research work was done by him/hers and that this work has not been submitted elsewhere for the award of any other diploma or degree.

9.6 Every student submitting a project report in partial fulfillment of the requirement of a degree shall be required to appear at an oral examination, on a date or dates fixed by the Supervisor concerned in consultation with the Head of the Department / Director of the Institute and must satisfy the examiners that he/she has gained satisfactory knowledge related to the project work.

9.7 Examination Board

9.7.1 An Examination Board for every student for the project and oral examination shall consist of at least three members including the Supervisor. The Supervisor shall act as the Chairman. The BPGS / RAC shall recommend the names of the examiners for approval of the Vice-Chancellor. This approval will be reported to the CASR. The Examination Board shall be constituted as follows:

(i)	Supervisor	Chairman
(ii)	One member from within the Department/Institute	Member
(iii)	One member from within or outside the Department/Institute	Member (External)

9.7.2 If any examiner is unable to accept the appointment or has to relinquish his/her appointment before the examination the Vice-Chancellor shall appoint another examiner in his/her place on the recommendation of the relevant BPGS / RAC. This appointment will be reported to the CASR.

9.7.3 In case a student fails to satisfy the Examination Board in project report and /or oral examination, the student shall be given one more chance to resubmit the project report and/or appear in oral examination as recommended by the Board.

10. Striking off and removal of names from the rolls

The name of the student shall be struck off and / or removed from the rolls of the University on the following grounds:

(i) Non-payment of dues within prescribed period. Post graduate students residing in the halls of residence shall be subject to the same conditions as allowed in the Ordinance Relating to the Board of Residence and Discipline.

(ii) Failing to proceed with the programme by the exercise of Art.4.1 or 7.2 or 7.3 of this Ordinance.

(iii) Failing to make satisfactory progress in his/her programme as reported by the supervisor through the BPGS and approved by CASR.

(iv) Forced to discontinue his/her studies by the Board of Residence and Discipline.

(v) Withdrawn officially from the Masters Degree Programme.

11. Academic Fees

Items of Academic fees shall be as per Appendix III, and the fees shall be reviewed and recommended from time to time by the Academic Council.

12. Refund of Fees

A student withdrawing officially from all courses and / or thesis as per Art. 10(v) is entitled to get a refund of 50% of the course registration fees provided, he / she withdraws in writing through the respective Head of the Department before the expiry of two working weeks from the commencement of the classes. Thesis/ Project registration fees in any case are not refundable.